

Nordic Journal of Surveying and Real Estate Research 11:1 (2016) 18–36

submitted on 2 February, 2015

revised on 23 April, 2015

accepted on 5 May, 2015

Lessor's Status in Land Consolidation in Finland

Kimmo Sulonen

kimmo.sulonen@gmail.com

Cadastral surveyor of the City of Tampere

P.O. Box 487 FI-33101 Tampere, Finland

Seija Kotilainen, Finland

seija.kotilainen@nls.fi

Senior Advisor at the Support Services of the National Land Survey of Finland

P.O. Box 84 FI-00521 Helsinki, Finland

Abstract. *The purpose of this research is to investigate lessor's status in land consolidation procedures in Finland. This status was investigated from the functional and juridical points of view. The research was based on survey made for lessors and supporting surveys made for land consolidation experts. The main purpose of the surveys was to find out how the lessors themselves experienced their status.*

According to the results the lessors' experiences in land consolidation (LC) phases are mostly moderate or slightly positive but not wholly positive. This is by the lessors' concern that land consolidation causes additional and unnecessary costs for them. Experiences of costs, such as cost distribution and how well the rents of arable lands cover the costs of land consolidation are most negative among lessors. The most positive experiences are from road and ditch improvements. However the experience varies slightly between regions.

Altogether, the status of lessor may be improved in the future by focusing to informing and cost-sharing. The informing of the lessors can be information of different phases of land consolidation along with the lessor's opportunities to influence on those phases. Sharing the costs with the leaseholder requires that lease periods are longer than a few years.

Keywords. *Lessor, landowner, leaseholder, land consolidation, survey study*

1 Introduction

1.1 Agricultural land lease in Finland

Leasing cultivated land has increased greatly in Finland since the 1960s. The amount of leased farmland has increased particularly after 1995 when Finland joined the European Union (EU) and began to implement the Union's common agricultural policy. (Tike, 2010, p.31; Niemi & Alshedt 2011, pp. 14–15.)

Currently 35 percent of the total area used for cultivating is leased¹ (Tike 2010, p.31). The great amount of leased land is not a completely new in Finland. The leasing was common on agricultural areas on the beginning of 20th century before it decreased greatly due to a major legislative reform which allowed leaseholders to purchase the land they leased (Haataja, 1934, pp. 5–8). These leaseholders were known as crofters and very often they were not in a good position comparing to lessors (Jutikkala 1942, pp. 587–589). The setup between lessor and leaseholder is different these days and the leaseholder's status has improved. However lessor's status is often left unstudied. Perhaps there is a general opinion in Finland that the status of a lessor is still highly guaranteed and need not to be reach object. However when more than third of the cultivated areas are leased it means that there are many lessors involved in land consolidations (LC).

1.2 Objects of the study

The purpose of this study is to investigate if there is any need for improvement in lessor's status or treatment in land consolidation and if so, what are the factors that improve their status? This research problem is explained with through three more detailed questions.

1. What are current processes in land consolidation from the lessor's point of view?
2. How do lessors experience different phases of the land consolidation process and results of land consolidation, and how is lessors' status taken into account in those phases?
3. Is it possible to develop the land consolidation process in such a manner that it is more attractive from the lessor's point of view and if so, which factors should be improved? In other words, what is the operation model for land consolidation which serves the lessor's interests in the most suitable manner?

The research is based on survey made for lessors and supporting survey. The supporting survey is for land consolidation experts who take part of land consolidation processes. The purpose of the surveys is to find out what is the lessor's experience of land consolidation and their status in it.

2 Concepts and methods

2.1 General concepts and methods

The key concepts which are used in this article are presented briefly in this chapter. The land consolidation in Finland is an official procedure, whose purpose is to improve the current use of properties and property division by reallocating land parcels. The reallocation is done without changing the ownership of properties as much as possible. Additionally, in land consolidation the road network and ditches for draining excess water can be improved. The prerequisites of land

¹ The statistics are from 2008. Additionally the statistics indicate that leased land area has increased three percent per each year between 2000 and 2008. (Tike 2010, p.31.)

consolidation are defined in the Real Estate Formation Act (554/1995 later REFA) chapter 9 section 67. (Vitikainen 2003 p. 1; NLS 2014 section 8; REFA 554/1995 section 67.)

The word “lessor” means a landowner, who rents out the land to someone in a land consolidation area. The word “leaseholder” is correspondingly the one who uses these leased out lands. The word “specialists” is used to describe those who will participate or who have participated in land consolidation processes as a representative of the authorities or the state in National Land Survey of Finland (NLS).

The study is mainly based on qualitative research methods. The quantitative methods were used as an aid for the qualitative methods, e.g. calculating averages of certain factors such as lessors' age, total leased area etc. The use of both qualitative and quantitative methods improved the reliability of the research. One of the qualitative methods in use was content analysis. This method was used to analyse the literal sources and the results of the survey, and find out main topics from the data. Therefore, the mainline of this research is the empirical research to collect empirical evidence, the survey data. The empirical evidence and collection methods such as surveys are presented in more detail in chapter 4.

2.2 Focus of the article

The main focus of land consolidations in Finland is on agricultural areas. There are cases where land consolidation is done in forestry areas and it is possible that these kinds of land consolidations will have more value in the future. (MMM 2015 pp. 10–14.) Therefore, this article concentrates on land lease on land consolidation areas on agricultural lands. Lease in urban areas is not included in this article. Moreover, there are limitations in the examined land consolidations. The cases had to be conducted and registered during the last 15 years. The limitations are to ensure that the land consolidation processes were comparable with each other.

2.3 Legislative concept of the lease

At the time of the Finnish crofter issue, Kyösti Haataja (1921) defined the concept of land lease. The definition was as follows: *The private land lease is a contract based on a legal relationship where the lessor assigns property to the leaseholder's possession for a defined period of time and with the payment of compensation* (Haataja 1921. p. 253). Furthermore, the lease must include the payment of compensation to the lessor, otherwise it is a loan (Saarnilehto 2006, p. 2).

The basis of this century old concept is still in use, but during the following decades the concept has been specified further. The format and validity times of contracts are currently regulated (258/1966 later AoT). The legislation does not recognise long-term oral agricultural land lease contracts, where as oral contracts were a common form of contract especially in the late 19th and early 20th centuries (Haataja 1934 p. 44; AoT 258/1966 section 3).

The lease in Finland should be applied for the registration if the lease right is transferable to a third party without hearing the titleholder and if the lease contract allows building in the area or there are buildings in the area that belongs the

leaseholder. (CRE 540/1995 chapter 14 sections 1–2). However, this option is more commonly used properties in urban areas and usually is not the case in rural areas. Additionally, lands can be leased, if based for agricultural use, up to 20 years and up to 25 years if there are buildings suitable for agricultural use². (AoT 258/1966 sections 57 and 71). The maximum lease period in either case is shorter than the lease of urban plots, between 30 to 100 years. (AoT sections 28 and 73). Despite the legislative possibilities, contracts are made for five years on the average. (Sulonen 2014 p. 42–43). Therefore the leases in agricultural areas are not as strictly regulated than lease in urban areas and do not usually require e.g. registration of the right. These rules allow leases on agricultural lands to be leased more flexible, but can cause uncertainty of the continuation of the lease.

3 Land lease in agricultural areas of Finland

3.1 *The significance of land lease in Finland*

The crofter issue was a major political problem in the beginning of the 20th century in Finland. The stability of the lease contract was in favour of lessors rather than crofters; and they were mostly oral contracts. Due to lack of written contracts and incomplete land lease legislation the lessor was able to unilaterally end the contract in many cases, and therefore it left the crofters at the lessor's mercy. (Jutikkala 1942, pp. 587–592.) This implied that in such cases the crofter's status was poor if the crofter's whole live hood depended on cultivating land.

Due to uneven setup between lessors and crofters the situation needed legislative changes that actualised especially after the independence of Finland in 1917. The long codification process led to new laws and changes of laws³, such as the crofter act (135/1918 later LVL), where crofters were able to take into possession their formerly leased lands. (LVL 135/1918; Lähde 2007, pp. 85–86.) This was one of the major land reforms in Finland. The proportion of leaseholders of all farmers decreased from 60% to 17% shortly after the reform in the 20th century (Lähde 2007, pp. 85–86; Haataja 1935 pp. 5–8). Compared to the rest of Europe, the land lease remained relatively strong due to the high price of land (Jutikkala 1942, p. 195).⁴

The proportion of leased land in Finland has increased in the past several decades and especially after 1995 when Finland joined the EU. This trend seems to continue. The increase is caused by the development where the number of farms

² The legislation allows lease contracts up to 20 years if the fields are leased to agricultural use and do not contain suitable structures for agricultural use (AoT section 71) and if leased under two years contracts can be made orally (AoT section 3). If the lease includes structures needed in agricultural use and living purposes the contracts can be made up to 25 years (AoT sections 57).

³ The act "Laki vuokra-alueiden lunastamisesta" (135/1918) is often called in Finland "Torpparilaki", which loosely translates as the Crofter Act. Additionally the codification included a special law for crofters in parish' lands (LVLEL 73/1921) and modification of Expropriation Act (603/1977).

⁴ Professor Eino Jutikkala has written about the Crofter problem in English in his Scandinavian Economic History Review Volume 10, Issue 1, 1962. Origin and rise of the crofter problem in Finland pages 78–83.

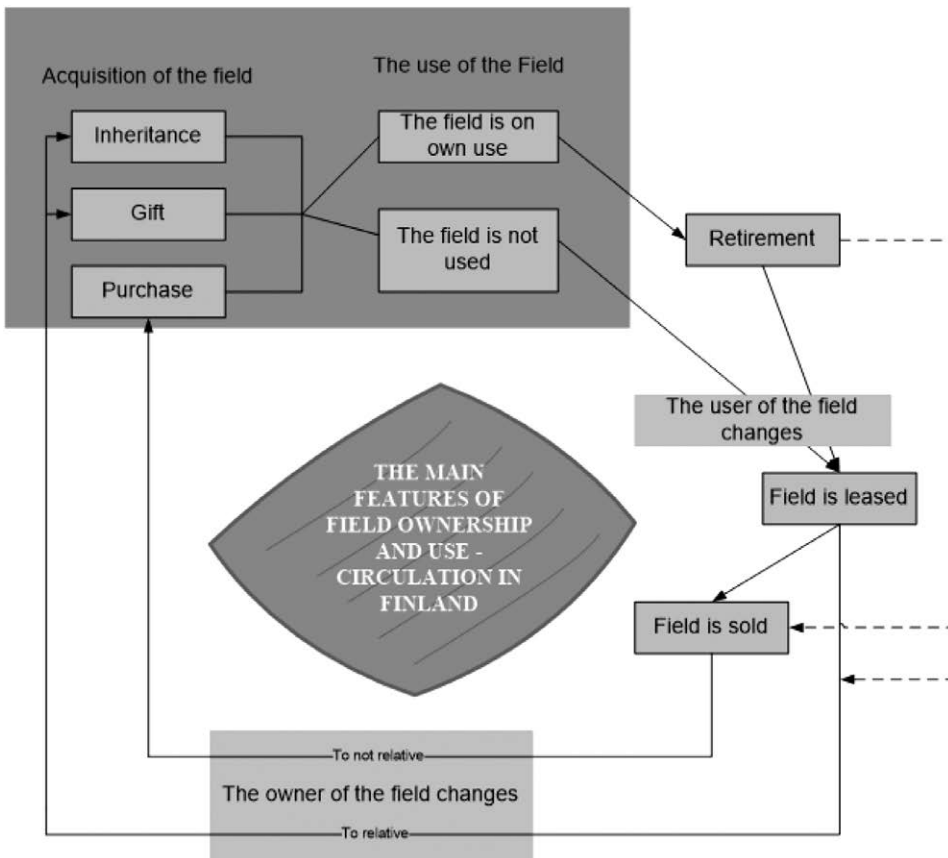


Figure 1. The main features of field circulation in Finland (lease).

is decreasing and the size of a farm is increasing. (Niemi & Alshtedt 2011, p. 66; Tike 2010, p. 34; Vitikainen 2003, p.7.) Approximately two thirds of the increase is due to the leasing of land (Niemi & Alshtedt 2011, p.15). The land owners do not like to sell their fields (Myyrä 2009, pp. 17, 22–24).

The leased fields were usually offered to lease markets after the retirement of the active farmer.⁵ The lease is part of field circulation from owner to other. The circulation is shown in Figure 1 where the figure depicts how land owners have got their land (inherited, as gift or by purchasing) and how they use it (own use, not own use and leasing). At some point the farmer retires and either leases the field or gives the ownership away⁶.

⁵ This phenomenon was strongly visible on surveyed land consolidation areas.

⁶ The option where the next generation continues the farming activity immediately after the retirement is presented with a dashed line where the land lease is skipped or the lease period is temporary and short.

3.2 The problems of land lease to land division

The land lease is considered as one form of land use in land consolidation. However, the lease or actions due to lease might lead into fragmentation of land division and therefore causing the need of land consolidations.

The historical development of land division in rural areas of Western Finland has led into situation where land division is fragmented. The crofter issue was one factor that affected the issue in the 20th century when legislation allowed tens of thousands of crofters to form new properties (Lähde 2007, pp. 85–86). Later amount of properties in rural areas has increased even more from 1960 up to 2010 decade (NLS 2013a, p. 11).

The larger farms have been acquiring farmland from smaller farms after Finland joined the EU⁷ (Vitikainen 2003 p.7). Approximately two of third of these acquisitions have been done by leasing land (Niemi & Alshtedt 2011, p.15). When the land is offered for lease the field parcel might not end up to the best possible user who would benefit the most from it. This can happen due to active competition of cultivatable lands among the farmers who will try to increase their production capacity. (Vitikainen 2003 p. 8.)

Väinö Ylikangas has estimated that the proportion of leased land is lowest in areas where property division is best (Ylikangas 2004 p. 11). One of the reasons might be that the sizes of leased parcels tend to be small on average (OK Note 2013b). Myyrä and Peltola (2006) present that if the size of field parcel is three hectares or less the size of the parcel causes a clear disadvantage to the user (Myyrä & Peltola 2006 p. 41). The phenomenon is visible in field market prices in Finland in 2013 where the price per hectare of sold parcels is the higher, the larger the parcel size is. The price per hectare increases up to 10 hectare parcels. (NLS 2013b, pp. 42–43.) Therefore, it is possible that land lease prevents the defragmentation of land or fragmented land division can cause land to be leased.

Additionally, the leaseholders usually threat the cultivated lands less properly than those farmers who own their land. Leaseholders' willingness to improve the land is related to that how probable the continuation of current lease contract is. (Myyrä 2009, pp. 17, 20–22.)

3.3 Lease in land consolidation

The National Land Survey (NLS) is responsible for land consolidations in Finland. The NLS occasionally conducts prior investigations of suitable areas. The investigation is conducted to determine whether or not to commence the actual land consolidation procedure⁸ and if state funds are available to the current case. (UjTL 24/1981; NLS 2014, section 8.) It is notable that the purpose of the land consolidation is common benefit and can be done within certain limitations if it causes some hindrance (REFA 554/1995 section 67). The land consolidation

⁷ Finland joined European Union in 1995.

⁸ The actual procedure consists of a partitioning plan, taking into possession and meetings where the authorities and parties can interact. Usually procedures have more than one meeting, e.g. the compensations and costs are usually divided and designated to the parties before the final meeting. The procedure can in some cases be disrupted or suspended without effects. (NLS 2014, section 8.)

can be executed without participant consent if needed (NLS 2014, section 8). However the possible hindrance should not be unreasonable to anyone (REFA 554/1995 section 67 subsection 2).

The law (REFA 554/1995) states that the leased area shall be amended to pertain to the lessors' new parcels, unless the change causes considerable hindrance to the leaseholder (REFA 554/1995, 86§). The length of the contract and possible costs for transferring the leaseholder's right determines how likely this is done (Hyvönen 2001, pp. 169–170). In practice the leaseholder's right to use lessor's the land is transferred to the lessor's new land parcels whenever possible without major additional costs or problems.

Distributing and dividing the costs of the consolidation between the lessors and leaseholders or only to one of the parties is a challenge. In some cases when the needs of the both participants are similar they might make a contract on how to divide them (Ylikangas 2004. p 22).

4 Results

4.1 Design and preparatory works of survey

The empirical evidence of this research was collected by surveys along with interviews by phone. The most central survey was an enquiry and sent to lessors who had participated in ten selected land consolidations in key land consolidations areas in Ostrobothnia area⁹, Finland. This survey included an additional interview for those who submitted their contact information on the answer sheet. The second survey was also an enquiry and sent to NSL land consolidation specialists¹⁰ working with land consolidation areas. The enquiries to lessors were conducted by traditional mail and the specialist survey through a web-based form in 2013.

The lessor survey had eight main sections and each of them had several sub-questions. The specialist survey was similarly divided, but it was designed from the viewpoint of authorities. One section of the questions was to inquire background data such as the rent, length of lease contracts, why the fields were rented, costs of the consolidation, etc. That was not directly related to land consolidation. The background data was inquired as aid for interpreting the experience and its effects. The other questions measured lessors' experience of land consolidation such as how they experienced different parts of the land consolidation procedure or its benefits afterwards. Most of the questions were form-based structured questions with pre-defined choices. On the surveys there were open¹¹ questions to elaborate certain answers. Also on the lessor survey the last question was open

⁹ The Ostrobothnia area is located in west coast of Finland and covers the regions of Northern, Southern, Central Ostrobothnia and Ostrobothnia. The survey was conducted in Finnish and Swedish according the major language of each region.

¹⁰ The second survey was sent to all such specialists in Finland who were on the NSL mailing list for cadastral surveyors working with land consolidations and project leaders.

¹¹ Open in this context indicates questions where there were no pre-defined answer choices.

where the participant could answer anything related to the status of lessors in land consolidations. The questions were based on hypotheses¹².

There were two criteria used during the selection of land consolidations as objects of the lessors' survey. These land consolidations had to have been constructed between the years 2000 and 2013. This means the land consolidations had to be relatively new and they had to be concluded before the research began. These consolidations were also picked from different regions in key land consolidation areas (Ostrobothnia) in Finland as equally as possible. The surveys were conducted in the summer of 2013 (from June to October).¹³

There was a notable fact found when listing participants to the survey. Almost one of third of the participants was classified as heirs. In heirs the person responsible for property management is more difficult to define. However, there was a person listed in archived land consolidation data in two out of three cases. This data was retrieved from the NLS archives. The remaining cases, where there was no assigned person to be responsible the eldest child or widow was selected as participant¹⁴.

The reason why so many lessors in the selected areas were heirs is found in demographics. The average age of the farmers in Finland in 2011 was 51,4 years (Niemi & Alshtedt 2011 p. 15). This is approximately ten years higher than average age of labour in Finland in 2007 (Myrskylä 2009). The average age of lessors in selected land consolidation areas in different regions of Finland was 65,5 years. This is almost 15 years higher than the average age of farmers and 25 years higher than the average age of labour. The difference between average ages indicates that most lessors in Finland are retired farmers and some are the heirs of such farmers. (Sulonen 2014 p. 30.)

4.2 Basic results of the enquiries

The lessors were enquired how they experienced different land consolidation phases. The scale of one to ten was used to measure lessors' experience where one was the most negative and ten was the most positive experience. On the average, the experience of land consolidations among lessors was between grades 5 and 7 and in general it was 5–9¹⁵. The most positive experience was from constructing the roads and ditches where as the division plans had the lowest grade (Figure 2.)

¹² These hypotheses were formed before the enquiry and constructed to questions, that were asked. These questions were about the phases of LC, how the benefit of LC is divided, is the result sufficient, how is lease affected, are rents sufficient after LC and the status of the lease holder. In addition on the specialist survey there were questions about lessors' status and lease rearrangement.

¹³ The survey for lessors included 353 letters to participants and over 300 of those were reminded to respond with a second letter. In total, 163 responded to the survey. The open answers formed a great portion of the survey data where many of the form questions were elaborated with open answers and a third of the participants gave an open answer to the last question.

¹⁴ The prediction was that according to Finnish tradition the eldest child or widow is usually the caretaker of heirs or at least could forward the survey to the appropriate person.

¹⁵ The grades can be compared to total scale where grade 10 is the most positive experience and grade 1 is the most negative experience, grades between 5 and 6 are clearly neither positive nor negative.

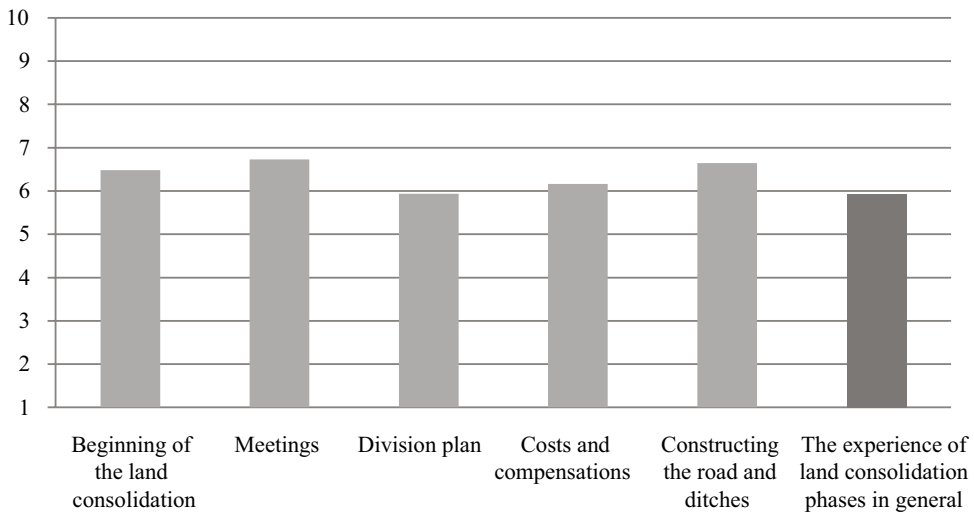


Figure 2. Results: the experience of different land consolidation phases.

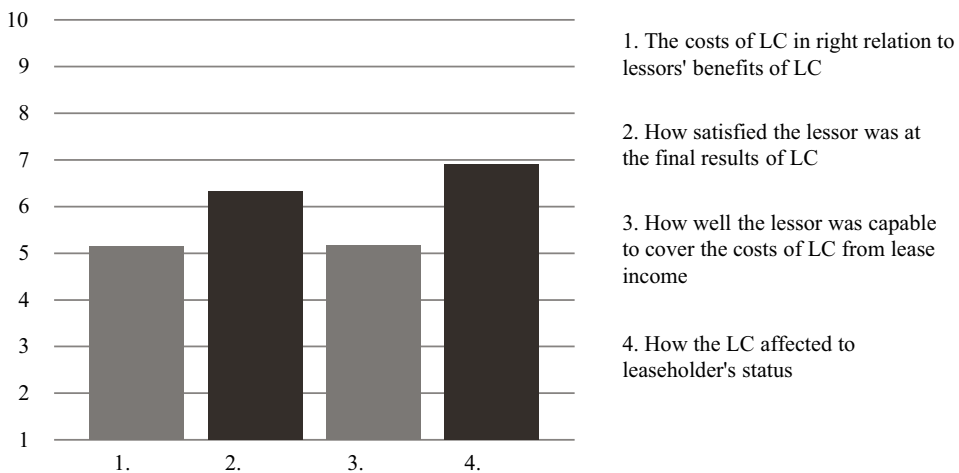


Figure 3. Lessors' experience of the final result of land consolidation and its effects.

The lessors' experience of costs in relation to benefits of the land consolidation and how well they could cover it from leasing income was average. As in comparison more positive experience was from final results of land consolidation and lease holders status was seen improved. (Figure 3.)

The open answer section contained more than 40 different answers. These answers had to be interpreted differently from the structure based answers by finding repetitive themes from the data. The major themes that were found were as follows: how land consolidation benefits the land owners owning large amounts of lands and active farmers. This phenomenon is perhaps due to the reason that lessors are usually small land owners and not active due to leasing. The heirs wanted more information when stating their position as being in an heir. Also

making the roads and ditches was often mentioned in the answers either in a positive or in a negative manner.

According to survey data only one third of the lessors lease their lands for gaining additional income. The most common reason for lease was either retirement from farming or illness where the landowner was incapable of cultivating land by himself¹⁶ and approximately one third of the leased lands ended up in the hand of the heirs of old farmers. Overall, the most common reason of agricultural land lease was direct or indirect consequence of the next generation change rather than leasing land as an investment.

The specialist survey was used as aid for creating the lessor survey; furthermore it was also used to verify the background data and to find out if there were any differences in the aspect of authorities and participants of land consolidation. The land consolidation specialists were aware of lessors' wishes and thoughts. This was measured comparing the data of both lessor and specialist surveys. On the one hand, based on the data there was lack of information about the heirs' situation. On the other hand in the specialist survey data there were thoughts on how to distribute more costs to leaseholders, therefore possibly changing the status of the lessors.

4.3 Dividing and comparing different factors of the data

The survey data was analysed by dividing the data with different factors¹⁷ for two or more sections. Those sections were later compared with each other to find out whether or not these factors would affect or not the survey data, and if so, how.

The first of the comparisons that had interesting results was done between survey participants with positive and negative experiences. In the comparison, the data was divided with the answers of the question measuring how the final result of the land consolidation was experienced¹⁸. The answers in the range of 1–5 were considered as negative experiences and those in the range of 6–10 where considered as positive experiences. The comparison defined if and how the average answers were different in each group.

When comparing the outcome of land consolidation between groups of positive and negative experiences, such as amounts of different field parcel sizes before and after land consolidation, it was notable how the outcome varied between the groups.¹⁹ Those with negative experiences tended to have a greater amount of medium sized (3–5 hectares) or large parcels (5 hectares or larger) before the land consolidation and received more large parcels as a result of the

¹⁶ Based on open answers there was elaborative information why land owners ended up leasing their lands, such as illness, old age, etc. For more complete information of the case, further studies are needed.

¹⁷ The inspected factors were the experience (positive vs. negative), the relatedness (close relative or not), the age (older than 65 vs. 65 or younger), was the participant willingly or not in the LC.

¹⁸ The question inquired how satisfied the participant was to the final result of the land consolidation.

¹⁹ One of the background questions was to inquire the number of different sized field parcels before and after the land consolidation. With this data it was possible to calculate the average change in the number of different sized parcels.

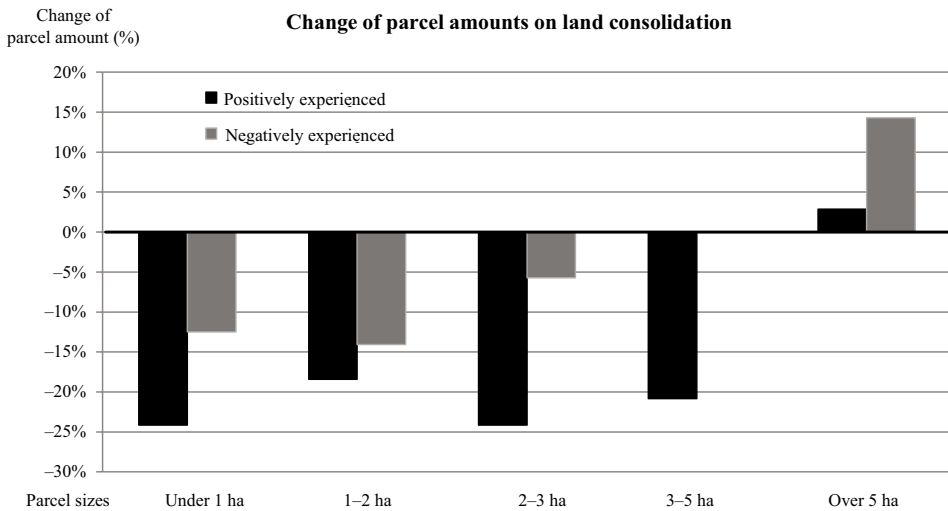


Figure 4. In the figure is presented how many field parcels the lessors had after the land consolidation in relation to situation before, where the lessors with positively or negatively experiences are presented in different groups.

allocation than they had before. Those with positive experiences tended to have greater amount of small (1–3 hectares) or medium sized parcels before the land consolidation and they received medium sized parcels and fewer small parcels as a result of allocation than before. In total, those with negative experiences had more larger parcels before and received (even more) larger parcels as a result of the land consolidation than lessors with positive experiences. The lessors with positive experiences did not receive as many large parcels, but lost more of their smallest parcels. The variation is shown in the (Figure 4) where the percentage represents the change in the number of parcels that each lessor had before and received as result of the land consolidation in each group of parcel sizes.

The phenomenon is possibly explained through expectations, where those with positive experiences had a worse starting situation before the land consolidation than those with negative experiences had when considering the number of parcels. Therefore, having parcels of the size of 5 hectares or more might not be seen a sufficient results of the land consolidation in the farmer's viewpoint. To clarify this assumption more thorough investigations are needed measuring other factors such as the quality of the exchanged land and separately analysing the actual location of the parcels.

The second interesting comparison was how the relationship between lessor and leaseholder affected different factors²⁰. Analyses show that lessors were more willing to in participate land consolidation of their own free will if the leaseholder was a close relative²¹ of the lessor. Also the rent of the field was lower and the

²⁰ One of the background questions was to inquire whether or not the lessor and leaseholder were close relatives.

²¹ Close relative was interpreted as a child or parent.

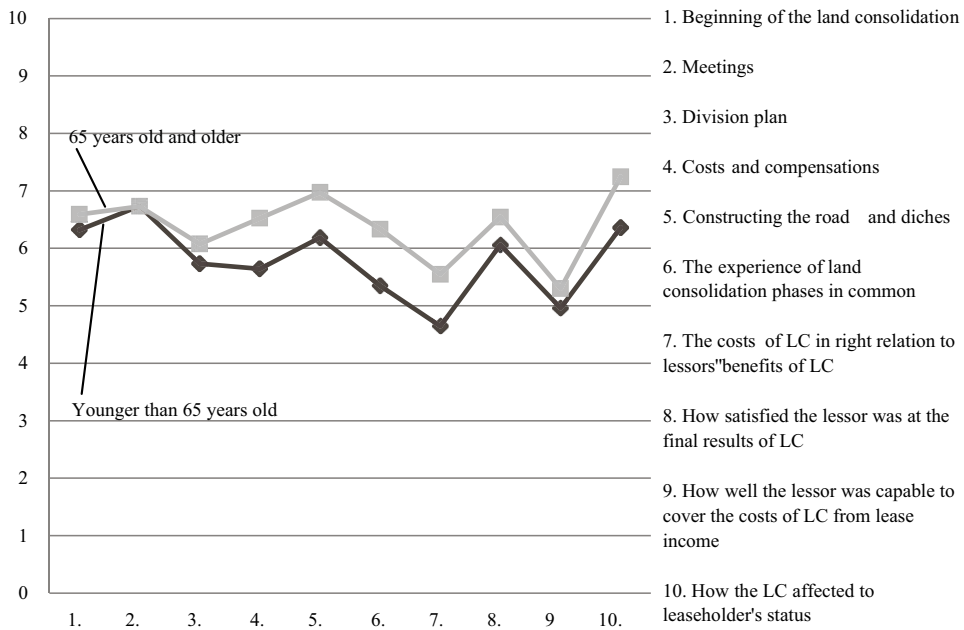


Figure 5. The differences in the experience of different age groups. The scale is diminished.

costs were shared more often with the lessor in cases where the parties were closely related.

The third interesting comparison was how lessors' age divided the survey data. Analyses show that lessors, whose average age was 65- years²² or older had more positive experiences of land consolidation phases and in general than did those lessors who were less than 65 years old. (Figure 5.) Especially those in the 65 years and older group experienced that the status of leaseholders was improved to greater extend. The differences are shown in Figure 5.

4.4 What are current processes in land consolidation from the lessor's point of view?

The lessor's status was observed in functional and juridical point of view. Analyses show that compared to landowner's status in general there are some characteristic differences in lessor's status. However all of the differences are not significant. One of the specific requirements in land consolidation is to uphold active lease contracts. This is done by law and affects to leaseholder's status as well and provides more stable fundamentals to lease contracts overall. Functionally, the placement of parcels can be reallocated in some cases, according to the leaseholder's needs, if lessor does not object to such allocation. Therefore, the lessor's interests are crucial in cases of contradiction. Perhaps the reason for favouring more of the lessor's interest is that lease periods are not commonly

²² In Finland the age 60–65 is a common age for retirement.

long enough to do otherwise. Additionally, the costs of the land consolidation or improvements can be distributed with the lessor and the leaseholder if the leaseholder is significantly benefitting from the case. However, benefits to leaseholder can occur if the leaseholder has a long lease contract.

4.5 How do lessors experience different phases of the land consolidation process and the results of land consolidation, and how lessors' status is taken into account in those phases?

The lessors were fairly content with the land consolidation phases, the results and the process in general.²³ The experiences from road and drainage improvements were mostly positive. Altogether, the improvements were seen to benefit all in the land consolidation area whether or not they were farmers or other inhabitants. The lessors' experiences in distribution of the costs were more negative than the other phases of the land consolidation, although the experiences of these phases were on the average neither significantly positive nor negative. In some cases the lessor felt that supervising the subcontractors' work was insufficient.

Lessors who inherited the land from retired farmers felt that they lack information about land consolidation. These lessors do not necessarily have any experience of farming and they usually live far away from their leased properties. Also, in many cases the heirs still have shared ownership where the property of the deceased is not yet divided and therefore is managed by a single heir or a third party. It is probable that these heirs do not participate actively in property management or they might have little or no experience of actual farming. This specific situation of heirs might cause them to feel that they need more guidance.

When observing all given answers by lessors, many of them expressed a suspicious attitude towards the costs and some towards the land consolidation process itself. This opinion was present more often at the beginning of the land consolidation process than at the end of it. To further clarify this phenomenon it might be worthwhile to study the experience separately in different phases of the land consolidation process.

4.6 What is the operation model for land consolidation which serves the lessor's interests in the most suitable manner?

According to the surveys there are some topics where the lessor's status can be improved such as informing, quality control on land improvements (constructing ditch and road network) and distributing the costs to land owners and users. The quality control itself requires some additional resources such as for arbitrary check-up. The major problems in certain areas are the lack of suitable contractors from which to choose. To be able to distribute costs, longer lease contracts²⁴ are required. Additionally, means to lengthen the lease contracts are required where the legislative possibilities for longer contracts do not seem to suffice alone.

²³ The average answers were from 5 to 7 in a scale of 1 to 10 where 10 was the most positive experience. The answers above number 5 were considered as positive. Therefore the average experience was fairly content.

²⁴ Based on survey data the average length of lease contracts is 5 years on 2013.

4.7 Evaluation

The evaluation is essential to the validity of the research. When evaluating qualitative research four factors can be used. Such factors are credibility, transferability, dependability, confirmability (Lincoln & Guba 1985 pp. 218–219; Eskola and Suoranta 1998 pp. 208–212). E.g., both open and structured questions were used in the surveys to increase the credibility of the answers, where the pre-defined structured questions were based on hypothesis, the option for open answer allowed the possible additional information to show up if there was any. For transferability the surveyed lessors were picked in a manner that the result could be transferable as best as possible to lessors in other land consolidations on agricultural areas.

Moreover, the research included qualitative methods such as numeric calculations (averages etc.). These methods were used as aids to quantitative methods. Due to minor significance of quantitative methods, the methods were not evaluated apart from qualitative methods.

5 Discussion

5.1 Informing and interaction

Developing interaction during land consolidation, such as involving participants to the process, might decrease some of the opposition towards the land consolidation process. For example, when selecting the representatives of participants for the procedure and the improvement phase, at least one should represent the group of lessors. Selecting a lessor or lessors to these representatives grants the lessors a special status as an interest group and therefore should increase the lessors' trust towards actions in land consolidations.

Besides the interaction with authorities and participants the interaction among participants should be encouraged, such as encourage lessors and leaseholders to reach agreements with each other. This is because generally landowners' possibilities to influence the outcome of the land consolidation would have been better if landowners had made an agreement with each other (Ahllund 2004, p. 219).

It is possible that some lessors do not think they would gain any profit from, or are at least suspicious of the profit they would gain from significantly large field parcels such as 5 hectares or more. According to NSL statistics of property sales the larger the bought parcel, the higher the price per field hectare is. The price per hectare increases up to 10 hectare parcels (NLS 2013b, pp. 42–43). Therefore, the actual increase in property value is shown only if the field parcel is sold. The lessors with negative experience had usually more these larger field parcels than those with positive experiences had had a result of the land consolidation. These particular lessors might not be aware how the value of their land has increased or they might care more about other values.

5.2 The status of the lease and lessor's in future

The leasing of agricultural land in Finland might develop in various directions. Some possible scenarios presented in this article. One major question is e.g. is the

purpose of the lease changing, and if so is, the lease becoming more popular and profitable investment as in many other European countries.

The future scenarios:

1. One of the scenarios describes the situation where the proportion of leased agricultural land is decreasing or stable. The group of retired farmers is still the largest group of lessors. The parcels that end up in the hands of heirs are mostly sold as leasing the agricultural land is not seen as a reasonably profitable investment. The active farmers tend to buy land from retired farmers or their heirs. Due to this development, older lessors and heirs' might be more willing to sell their field parcels or exchange them for forest parcels during a land consolidation process. If this scenario happens the next step could be to develop the land exchange and buying processes on land consolidation.
2. The second scenario describes the situation where the proportion of leased agricultural land is increasing. The group of retired farmers and their heirs are still the largest group of lessors. However, the ownership of the land is falling to the heirs of the retired farmers. The active farmers tend to lease land from retired farmers or their heirs. The parcels owned by these groups are mostly seen as a reasonably profitable investment. Due to this development, the demand increases the rent of cultivated land, and therefore, prices of leased parcels in general. This scenario causes land division to fragment even more.
3. The third scenario describes the situation between the first and second scenarios, where the proportion of leased agricultural land is stable. There are two major types of lessors. A significant amount of lessors are more willing to sell their field parcels as leasing the agricultural land is not seen as a reasonably profitable investment. However many lessors do consider leasing profitable enough for their purposes. The active farmers tend to lease and buy land from retired farmers or their heirs. If this scenario happens, the next step could be to develop the land exchange and buying processes in land consolidation.

5.3 *Jointly owned fields*

The second scenario leads Finnish leasing behaviour towards a situation similar to that in central European areas such as in the state of Bavaria. The lease prices (per hectare) are much higher and leasing cultivated land is more common in Central Europe than in Finland. The possible option in scenarios two and three is also founding joint fields similar to jointly owned forests in Finland. The jointly owned field could be an association where number of lessors shares one field parcel. This parcel could be formed in a land consolidation process where single-owned parcels are joined together and the ownership is shared between those who ceded their parcels to this association.

The jointly owned fields might benefit the lessors in many ways, such as increasing the price of the land, accumulating a steadier income and the association management is concentrated to more professional hands. Additionally the greater

sized parcel might simply be more tempting to leaseholders than having many smaller parcels in different locations and therefore easier to lease. The opposite view towards jointly owned fields might be a situation where the land owner wants the heir to continue farming the parcels that have been in the family for generations.

The joint field benefits would be seen on the lease markets, where larger field areas are leased more often or with better rent. Furthermore, the benefits of joint field areas might be seen as environmentally friendlier especially when considering nutrient leaches (Myyrä & Pouta 2009).

5.4 Further researches

One interesting question is to clarify lessors' or perhaps landowners' experience in general through the whole land consolidation process. When the survey participant recalls the experience of land consolidation and its phases it is likely that the overall result of the land consolidation affects how the participant recalls the experience from earlier phases. Therefore, it might be worthwhile to conduct separate surveys in different land consolidations during and after the land consolidation to clarify whether or not the attitude of participants is changing and if so, how. This method clarifies the following assumptions presented: such as are lessors with negative experiences suspicious before the land consolidation and do they have higher expectations of the results.

Furthermore, there is need to do post research if and how land consolidation has affected lease contracts, such as the length of the lease contracts and rents and is there more demand for lessor's fields in lease markets. This kind of data is possible to acquire after 5 to 10 years or more, depending on the renewal rate of the lease contracts in the area.

There is need for further research in terms of why land is leased rather than sold, especially in lessors viewpoint. According to the survey one of the reasons why farmers and heirs decide not to sell but lease the unused lands is how they value the land by itself. This probably means that if the land has been in the family for a long time, it might have a personal value that does not correspond with market value. Therefore, the leasing the land is considered a good alternative to selling it in spite of the low investment values. To clarify how this phenomenon, or other factor, is present when the farmer decides the future of his properties, further research is needed.

Acknowledgements. *The support of the National Land Survey of Finland for this research is greatly acknowledged.*

References

- Ahllund, O. 2004. *The Position of the Landowner and His/Her Degree of Influence on Land Consolidations Specially within the Municipality of Pedersöre from Early Land Consolidations to Present Time*. Institute of Real Estate Studies. Aalto University publication series, Doctoral dissertation. Espoo, ISBN 951-22-7005-6 (print). ISBN 951-22-7006-4 (PDF). ISSN 0785-5079. 251 p. + appendix.
- Eskola, J. ja Suoranta, J. 1998. *Johdatus laadulliseen tutkimukseen – (in English. Introduction to qualitative research)*. Vastapaino. (6. edition 2003). Tampere. ISBN: 951768035X, 266 s. pp. 208–212.
- Haataja, K. 1921. *Vuokran käsité – (in English. Definion of the lease)*. WSOY. Porvoo. 1921. 267 p.
- Haataja, K. 1934. *Suomen maanvuokraoikeus – (in English. Finnish land lease law)*. WSOY. Porvoo. 1935. 228 p.
- Hyvönen, V. O. 2001. *Kiinteistönmuodostamisoikeus II. Kiinteistötoimitukset – (in English, Property formation legislation II. Cadastral surveys)*. Ky Veikko O. Hyvönen & Co. Espoo. ISBN 951-98394-1-0. 712 s.
- Jutikkala, E. 1942. *Suomen talonpojan historia – Sekä katsaus talonpoikien asemaan Euroopan muissa maissa – (in English, History of a Finnish farmer – and look to the status of farmers in other European countries)*. WSOY. Porvoo. 692 p.
- Lähde, H. K., 2007. *Isojako ja torpparijärjestelmät*, Maanmittaus aikakauskirja. 82:2. Maanmittaustieteiden Seura. pp. 68–88.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry*. CA: Sage Publications, Beverly Hills. ISBN-13: 978-0803924314. pp. 419.
- MMM. 2015. Ministry of Agriculture and Forestry land consolidation strategy 2015–2015. Ministry of Agriculture and Forestry. ISBN 978-952-453-875-6 (PDF). 16 p. Accessible: http://www.mmm.fi/fi/index/julkaisut/julkaisuarkisto/mmm_julkaisusarja_2015_1.html
- Myrskylä, P. 2009. *Hyvinvointikatsaus 2/2009*, Article in Statistics Finland. 18.6.2009. [referred 3.11.2013]. Accessible: http://www.stat.fi/artikkelit/2009/art_2009-06-08_006.html?s=0
- Myyrä, S. & Peltola, R. 2006. *Peltolohkojen tavoitteellinen koko on ”harmaa-alue”- (In English, the optimal size of field parcel size)*. Article in Maankäyttö 2/2006. pp. 40–43.
- Myyrä, S. & Pouta, E. 2009. *Yhteispelto tukemaan tuottavuutta ja vesiensuojelua*. Article in Maaseudun tulevaisuus. 31.7.2009.
- Myyrä, S. 2009. *Land Leasing and agricultural productivity in Finland*. University of Helsinki, Faculty of Agriculture and Forestry, Department of Economics and Management. MTT Agrifood Research Finland. Doctoral dissertation (article-based). Tampereen yliopiston kirjapaino Juvenes print Oy. Tampere. ISBN 978-952-487-246-1 (print). ISBN 978-952-487-246-1 (PDF). 34 p.
- Niemi, J. & Ahlstedt, J. 2011. *Finnish Agriculture and Rural Industries 2011* Agrifood Research Finland (MTT), Vammalan kirjapaino Oy. ISBN 978-951-687-158-8 (print). ISBN 978-951-687-159-5 (PDF). 96 ps.

Accessible: <https://portal.mtt.fi/portal/page/portal/mtt/mtt/julkaisut/suomenmaatalousjamaaseutuelinkeinot>

NLS. 2013a. National Land Survey of Finland, *Yearly statistics 2012*. Helsinki 2013. ISSN-L 0785-7675 (print). ISSN 1799-6600. (PDF). 27 p.

Accessible: <http://www.maanmittauslaitos.fi/tilastot>

NLS. 2013b. *Property sales statistics 2013* – Official Statistics of Finland. Helsinki 2013, ISBN 978-951-48-0241-6, ISSN 1799-6244. 72 p.

Accessible: http://www.maanmittauslaitos.fi/sites/default/files/kiinteistojen_kauppahintatilasto_2013.pdf

NLS. 2014. *Toimitusmenettelyn käsikirja (eng. Manual for cadastral procedures)*. National land survey of Finland. 23.11.2014

Accessible: <http://www.maanmittauslaitos.fi/toimitusmenettelynkasikirja>

OK 2013b. *Note from meeting*. Controlgroup meeting. Participants: Kotilainen Seija, Konttinen Kalle, Laitinen Tero, Sulonen Kimmo. 11.6.2013.

Saarnilehto, A. 2006. *Tenancy law. Principles and special regulation*. WSOYpro. Helsinki. ISBN 951-0-31161-8. 121 p.

Sulonen, K. 2014. *Lessor's status on land consolidation. Institute of Real Estate Studies*. Aalto University. Master's thesis. Espoo. URN:NBN:fi:aalto-201404161688. 70 + 29 p.

Tike. 2010. *Farm register 2009 – Official statistics of Finland*. Information Centre of the Ministry of Agriculture and Forestry. Edita Prima Oy, Helsinki. ISSN 1795-5165. ISSN 0785-7500. 91 p.

Vitikainen, A. 2003. *Development of the Land Consolidation Procedure*. Institute of Real Estate Studies publications A 32. Helsinki University of Technology. Doctoral dissertation (monograph). Espoo. ISBN 951-22-6530-3 (nide), ISBN 951-22-6531-1 (PDF). 199 p.

Ylikangas, V. 2004. *Peltotilusjärjestelyjen tarve ja mahdollisuudet Suomessa – (in English, The need and possibilities of field land consolidations in Finland)*. National Land Survey of Finland (NLS). NLS publications number 95. ISBN 951-48-0180-6. ISSN 1236-5084. 24 p.

Legislation

The Finnish legislation can be accessed on the internet service Finlex. Web-address: <http://www.finlex.fi/en/>

AoT	Act on Tenancy (258/1966).
CRE	Code of Real Estate (540/1995)
Expropriation act	So-called expropriation act. Act on the Redemption of Immoveable Property and Special Rights (603/1977).
LVL	So-called ”Torpparilaki”. Laki vuokra-alueiden lunastamisesta (135/1918). ”Crofter act”
LVLEL	Laki evankelis-luterilaisten ja kreikkalais-katolisten seurakuntain papiston ja lukkarin virkataloihin kuuluvain torppa- ja mäkitupa-alueiden lunastamisesta (73/1921).

REFA	Real Estate Formation Act (554/1995).
UjTL	Laki uusjakojen tukemisesta (24/1981)

Abbreviations

EU	European Union
NLS	National Land Survey of Finland
LC	Land consolidation